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WHAT IS CLAIMED IS:

1. A gimbaled bladder actuator, said actuator comprising:

a gimbaled compression pad; and

actuating means for contacting said gimbaled compression pad with a bladder in a manner sufficient to compress said bladder.

10 2. The gimbaled bladder actuator according to Claim 1, wherein said actuating means comprises a lever arm under the control of an automatic movement means.

3. The gimbaled bladder actuator according to Claim 2, wherein said automatic movement means comprises a solenoid.

4. The gimbaled bladder actuator according to Claim 2, wherein said lever arm is attached to said movement means by a chassis.

5. A gimbaled bladder actuator, said actuator comprising:

(a) a gimbaled compression pad; and

(b) actuating means for contacting said gimbaled compression pad with a bladder in a manner sufficient to compress said bladder, wherein said actuating means comprises:

(i) a vever arm;

(ii) a chassis; and

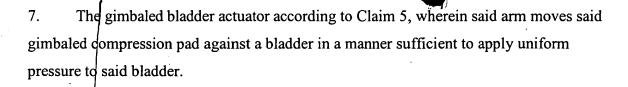
(iii) a solenoid.

6. The gimbaled bladder actuator according to Claim 5, wherein said gimbaled compression pad has an actual area ranging from about 0.19 square inches to 0.21 square inches.

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- 8. The gimbaled bladder actuator according to Claim 5, wherein said gimbaled compression pad is capable of placing a compressive force on a bladder ranging from about 1 lb to 1.5 lb.
- 9. An automatic meter for reading a test strip, said meter comprising:
 a gimbaled bladder actuator, wherein said gimbaled bladder actuator comprises:
 - (a) \ a gimbaled compression pad; and
 - (b) actuating means for contacting said gimbaled compression pad with a bladder in a manner sufficient to compress said bladder.
- 15 10. The automatic meter according to Claim 9, wherein said actuating means comprises a lever arm under the control of an automatic movement means.
 - 11. The automatic meter according to Claim 10, wherein said automatic movement means is a solenoid movement means.
 - 12. The automatic meter according to Claim 10, wherein said lever arm is attached to said movement means by a chassis.
 - 13. The automatic meter according to Claim 9, wherein said gimbaled compression pad has an actual area ranging from about 0.19 square inches to 0.21 square inches.
 - 14. The automatic meter according to Claim 9, wherein said arm moves said gimbaled compression pad against a bladder in a manner sufficient to apply uniform pressure to said bladder.

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- 15. The automatic meter according to Claim 9, wherein said gimbaled compression pad is capable of placing a compressive force on a bladder ranging from about 1 lb to 1.5 lb.
- 5 16. A method of moving sample fluid in a test strip that includes a bladder, said method comprising:
 - (a) positioning a bladder of said test strip in operative relationship with a gimbaled bladder actuator, wherein said gimbaled bladder actuator comprises:
 - (i) a gimbaled compression pad; and
 - (ii) actuating means for contacting said gimbaled compression pad with a bladder in a manner sufficient to compress said bladder;
 - (b) actuating said actuating means in a manner sufficient to compress said bladder;
 - (c) applying said sample fluid to a sample receiving region of said test strip; and
 - (d) actuating said actuating means in a manner sufficient to decompress said bladder and thereby move said sample fluid in said test strip; whereby said sample fluid is moved in said test strip.
- 20 17. The method according to Claim 16, wherein said gimbaled bladder actuator is a component of a meter and said method further comprises introducing said test strip into said meter.
 - 18. The method according to Claim 16, wherein said actuating means comprises a lever arm under the control of an automatic movement means.
 - 19. The method according to Claim 18, wherein said automatic movement means is a solenoid movement means.
- 30 20. The method according to Claim 18, wherein said lever arm is attached to said movement means by a chassis.

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